

ABSTRACT OF THE DISCLOSURE

A semiconductor device, including a dummy diffused layer in the upper part of a substrate, has its noise immunity improved. The dummy diffused layer is formed between analog and digital blocks to eliminate dishing, which usually occurs during a CMP process for defining STI regions. The surface of the dummy diffused layer is covered with an anti-silicidation film at least partially and a dummy gate electrode so as not to be silicided. The dummy gate electrode can be formed along with a normal gate electrode for a transistor. Accordingly, there is no need to add any extra process step to the fabrication process.